frames of the packet data through the down first data channel IDCH1. In this case, control symbols included in the frame of the packet data are transmitted through a down control channel ICCH different from the down first data channel IDCH1. This down control channel ICCH is the channel using the spread code C1 in this embodiment 1. With respect to an up control channel OCCH, as shown in Fig. 2A, transmission is started by down synchronization establishment.

Besides, as shown in Fig. 2C, the base station 2 transmits dummy frames, the number of which is the same as the above, through the down second data channel IDCH2 in response to a timing delayed from the reference timing by predetermined frames. Thereafter, the base station 2 transmits predetermined frames of the packet data through the down second data channel IDCH2. In this case, the base station 2 newly uses a transmission start timing of the down second data channel IDCH2 as a reference timing.

Further, as shown in Fig. 2D, the base station 2 transmits dummy frames and predetermined frames of the packet data through the down third data channel IDCH3 in response to a timing delayed from this new reference timing by the predetermined frames. Moreover, as shown in Fig. 2E, the base station 2 transmits dummy frames and predetermined frames of the packet data through the down fourth data channel IDCH4 in response to a timing delayed from a reference timing as a

transmission start timing of the down third data channel IDCH3 by the predetermined frames.

Fig. 3 is a view for explaining multicode transmission of up packet data. The mobile station 1 suspends data transmission until the up packet data is generated. In the case where the up packet data is generated in this state, in response to a reference timing as a data transmission timing immediately after this data generation, the mobile station 1 transmits a predetermined number of dummy frames through an up first data channel ODCH1, and then it transmits the packet data subsequently to these through the up first data channel ODCH1. Besides, the mobile station 1 starts transmission through an up second data channel ODCH2 in response to a timing delayed from the reference timing by predetermined frames, and further starts transmission through an up third data channel ODCH3 and an up fourth data channel ODCH4 every time predetermined frames are delayed. With respect to a down control channel ICCH, as shown in Fig. 3A, transmission is started by up synchronization establishment.

As described above, according to this embodiment 1, when transmission is started in response to the generation of the packet data in the state where data transmission is suspended until the packet data is generated, the transmission is not simultaneously started with respect to all the data channels DCH assigned to one call, but the transmission is sequentially

started for the respective data channels DCH with a delay of predetermined frames. Accordingly, the abrupt increase of transmission power can be suppressed.

Thus, the abrupt increase of interference power to another user can be suppressed. As a numerical example, power suppression of about -15 dBμ to +50 dBμ can be realized. Therefore, the mobile station 1 and the base station 2 can execute the closed loop transmission power control excellently. More specifically, in the case where data transmission is started in the mobile station 1, the mobile station 1 relating to the other user can make the increase of transmission power instructed by the base station 2 while following the power increase of the mobile station 1 starting the data transmission. In the case where data transmission to the mobile station 1 is started in the base station 2, the base station 2 can make the increase of transmission power instructed by the mobile station 1 relating to the other user while following the power increase caused by the start of the data transmission. Thus, it is possible to prevent deterioration of transmission quality between the mobile station 1 relating to the other user and the base station 2. Accordingly, a high quality CDMA mobile communication system can be constructed.

Embodiment 2

Figs. 4A to 4E are views for explaining multicode